WHAT IS CLAIMED IS

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      1. An image extraction method comprising:
a first image pickup step to pick up an image
of an object positioned in front of a background
using wavelengths in a visible light region;
10   a second image pickup step to pick up an image
of the object positioned in front of the background
using wavelengths in an infrared region; and
      an extracting step to extract only the object
based on the images picked up by the first and
15 second image pickup steps,
      wherein at least a surface of the background is
formed by an organic dye.

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      2. The image extraction method as claimed
in claim 1, wherein said extracting step extracts
the object from the image picked up by the first
25 image pickup step depending on color, and extracts
the object from the image picked up by the second
image pickup step depending on luminance.

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      3. The image extraction method as claimed
in claim 1, wherein said organic dye has a color
selected from a group consisting of blue-green color,
35 gold color and silver color.

4. The image extraction method as claimed in claim 1, wherein said organic dye is selected from a group consisting of cyanine organic dyes, phthalocyanine organic dyes, and azo organic dyes.

5. An authentication apparatus comprising:

a first image pickup section to pick up an image of an object positioned in front of a background using wavelengths in a visible light region;

a second image pickup section to pick up an image of the object positioned in front of the background using wavelengths in an infrared region;

an extracting section to extract only an image of the object based on the images picked up by the first and second image pickup sections; and

a matching section to compare the image extracted by the extracting section and registered object images, and to output a result of comparison as an authentication result,

wherein at least a surface of the background is formed by an organic dye.

6. The authentication apparatus as claimed in claim 5, wherein said extracting section extracts the image of the object from the image picked up by the first image pickup section depending on color, and extracts the image of the object from the image picked up by the second image pickup section depending on luminance.

7. The authentication apparatus as claimed in claim 5, wherein said matching section outputs the comparison result by comparing an average of the image of the object extracted by the extracting section from the image picked up by the first image pickup section and the image of the object extracted by the extracting section from the image picked up by the second image pickup section, and the registered object images.

8. The authentication apparatus as claimed in claim 5, wherein the organic dye has a color selected from a group consisting of blue-green color, gold color and silver color.

9. The authentication apparatus as claimed in claim 5, wherein the organic dye is selected from a group consisting of cyanine organic dyes, phthalocyanine organic dyes, and azo organic dyes.